--This application is a divisional of U.S. application Serial No. 08/471,491, filed June 6, 1995, now U.S. Patent No. 6,090,611, which is a divisional of U.S. application Serial No. 08/256,848, filed October 21, 1994, now abandoned, which is a U.S. national phase application of PCT/EP93/00472, filed March 2, 1993 and PCT/EP/00158, filed January 25, 1993, which two PCT applications claimed priority benefit of Italian application Serial No. FI 92 A 000052, filed March 2, 1992, the entire contents of each application is incorporated by reference herein.--

Please replace the paragraph bridging pages 39-40 of the specification with the following:

--Preferred adjuvants to enhance effectiveness of the composition include, but are not limited to: (1) aluminum salts (alum), such as aluminum hydroxide, aluminum phosphate, aluminum sulfate, etc; (2) oil-in-water emulsion formulations (with or without other specific immunostimulating agents such as muramyl peptides (see below) or bacterial cell wall components), such as for example (a) MF59 (PCT Publ. No. WO 90/14837), containing 5% Squalene®, 0.5% Tween 80®, and 0.5% Span 85® (optionally containing various amounts of MTP-PE (see below), although not required) formulated into submicron particles using a microfluidizer such as Model 110Y microfluidizer (Microfluidics, Newton, MA), (b) SAF, containing 10% Squalane, 0.4% Tween 80®, 5% pluronic-blocked polymer L121, and thr-MDP (see below) either microfluidized into a submicron emulsion or vortexed to generate a larger particle size emulsion, and (c) Ribi™ adjuvant system (RAS), (Ribi Immunochem, Hamilton, MT) containing 2% Squalene®, 0.2% Tween 80®, and one or more bacterial cell wall components from the group consisting of monophosphorylipid A (MPL), trehalose dimycolate (TDM), and cell wall skeleton (CWS), preferably MPL + CWS (Detox™); (3) saponin adjuvants, such as Stimulon™ (Cambridge Bioscience, Worcester, MA) may be used or particles generated therefrom such as ISCOMs (immunostimulating complexes); (4) Complete Freunds Adjuvant (CFA) and Incomplete Freunds Adjuvant (IFA); (5) cytokines, such as interleukins (IL-1, IL-2, etc.), macrophage colony stimulating factor (M-CFS), tumor necrosis factor (TNF), etc; and (6) other substances that act as immunostimulating agents to enhance the effectiveness of the composition. Alum and MF59 are preferred.--

Please replace the paragraph spanning from page 52, line 15 to page 53, line 9 with the following replacement paragraph:

--The *cai* gene coded for a putative protein of 1147 amino acids, with predicted molecular weight of 128012.73 Daltons and an isoelectric point of 9.72. The basic properties of the purified protein were confirmed by two dimensional gel electrophoresis. The codon usage and the GC content (37%) ofthe gene were similar to that described for other *H. pylori* genes (13, 26). A putative ribosome binding site: AGGAG, was identified 5 base pairs upstream from the proposed ATG starting codon. Computer search for promoter sequences of the region upstream from the ATG start codon, identified sequences resembling either -10 or -35 regions, however, a region with good consensus to an *E. coli* promoter, or resembling published *H. pylori* promoter sequences was not found. Primer extension analysis of purified *H pylori* RNA showed that 104 and 214 base pairs upstream from the ATG start codon there are two transcriptional starts sites. Canonical promoters could not be identified upstream from either transcriptional initiation sites. The expression of a portion of the CAI antigen by clone 57/D suggests that *E. coli* is also recognizing a promoter in this region, however, it is not clear whether *E. coli* recognizes the same promoters of *H. pylori* or whether the *H. pylori* DNA that is rich in A-T provides *E. coli* with regions that may act as promoters. A rho independent terminator was identified downstream from the stop codon. In Fig. 4, the AGGAG ribosome binding site and terminator are underlined, and the repeated sequence and motif containing 6 asparagines are boxed. The CAI antigen was very hydrophilic, and did not show obvious leader peptide or transmembrane sequences. The most hydrophilic region was from amino acids 600 to 900, where also a number of unusual features can be observed: the repetition of the sequences EFKNGKNKDFSK (SEQ ID NO:9) and EPIYA (SEQ ID NO:10), and the presence of a stretch of six contiguous asparagines (boxed in Fig. 4).--

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Please replace the first paragraph on page 61 of the specification with the following paragraph:

--The following materials were deposited on December 15, 1992 and January 22, 1993 by Bioscine Sclavo, S.p.A. with the American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, VA 20110-2209, phone (703) 365-2700, under the terms of the Budapest Treaty on the International Recognition of the

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